

What Is Claimed Is

1. A centrifugal pump apparatus comprising:

a) a housing having a front wall and a rear wall, a discharge outlet opening in said top portion and opposing inlet means on opposite sides of the housing which creates equal pressure from both sides on an impeller,

b) a sloped impeller within and in spaced relationship with said housing, said impeller having outwardly extending blades along its periphery for movement of flowable material outward to the discharge outlet,

c) a drive shaft mounted in said housing and connectable to a motor means, said impeller and housing cooperating to discharge flowable material through said discharge outlet opening in response to rotation of said impeller.

2. The centrifugal pump of claim 1 wherein said housing has a pair of aligned fluid inlet means about the drive shaft.

3. The centrifugal pump of claim 1 including a drive shaft extending through a fluid inlet opening.

4. The centrifugal pump of claim 1 wherein said drive shaft includes a propeller.

5. The centrifugal pump of claim 1 wherein said impeller has a slope on both sides of about 30 to 45 degrees.

6. The centrifugal pump of claim 1 including a motor associated with said housing and a drive shaft within said housing operatively connected for rotation by said motor, and means for activating said motor.

7. The centrifugal pump of claim 6 wherein said pump is immersible.

8. The centrifugal pump of claim 1 wherein said impeller comprises plastic material.

9. The centrifugal pump of claim 1 including a drainage port in the bottom portion of said housing.
10. The centrifugal pump of claim 1 comprising a split impeller and a split housing.
11. The centrifugal pump of claim 1 wherein inlet openings on both sides of said housing create substantially equal pressure on both sides of said impeller by said flowable material.
12. The centrifugal pump of claim 1 in combination with a drive shaft hydraulic motor.
13. A self-priming centrifugal pump for use with fluids, gases, and solids comprising a drive shaft, a motor means for driving said drive shaft, a housing having a sloped impeller mounting on said shaft in spaced relationship within said housing, inlet means in said housing on opposite sides of said housing and said impeller about the shaft so that there is equal pressure on both sides of the impeller, and outlet means for discharging fluids, gases, or solids in response to rotation of said impeller.
14. The centrifugal pump apparatus of claim 13 wherein said housing comprises front, rear and side wall portions, a pair of aligned fluid inlet openings in said front and rear walls of said housing, each of said fluid inlet openings being of a greater dimension than the cross sectional dimension of the drive shaft.
15. The centrifugal pump apparatus of claim 14 wherein said drive shaft extends through said fluid inlet openings in spaced non-contacting relationship to said housing so that fluids entering said housing passes around said drive shaft substantially equally on both sides of the impeller means, across the sloped surface of the impeller means and through said outlet opening, and in which said discharge opening is formed in said side wall of

said housing and includes a nozzle means for creating a channel which extends outwardly of said housing generally tangentially with respect to said housing.

16. The centrifugal pump apparatus of claim 13 wherein said drive shaft is coupled to one side of said impeller means side and said motor means is coupled on the other side of said impeller means within said housing.

17. A fluid immersible discharge pump comprising a hydraulic motor, a housing associated with said motor, said housing having opposing fluid inlet openings and a fluid discharge opening, a drive shaft within said housing operatively connected for rotation by said motor, an impeller means associated with said drive shaft and rotatable within said housing so as to draw fluid into said housing through said inlet openings, said impeller means being sloped on both sides and having blades along its outward edge for discharging fluid through said discharge opening; said inlet openings being on both sides of said impeller means and creating substantially equal pressure on both sides of said impeller means, and mean separate from said motor for activating said motor when said housing is immersed in a fluid.